

acid, acrylic acid (or acrylic acid salt)/methacrylic acid (or methacrylic acid salt), or inoculated starch/acrylic acid (or acrylic acid salt) copolymers.

44. (Amended) The composition of claim 1 wherein said super absorbent polymers are products of reticulation of inoculated hydrolyzed starch/ethyl acrylate copolymers, hydrolyzed inoculated starch/methyl methacrylate copolymers, hydrolyzed inoculated starch/acrylonitrile copolymers, or hydrolyzed inoculated starch/acrylamide copolymers.

45. (Amended) The composition of claim 1 wherein said super absorbent polymers are products of reticulation of hydrolyzed ethyl methacrylate/vinyl acetate copolymers or of hydrolyzed methyl acrylate/vinyl acetate copolymers.

Please add new claim 46 as follows:

--46. Compositions for preservative treatment of raw animal hides as specified in claim 1, wherein the superabsorbent polymers have a grain size ranging from 0.3 to 4 mm.--

REMARKS

Claims 1-3 and 5-46 are pending in this application. By this Amendment, claim claims 1, 5-6, 14, 17, 21, 24-25, 31-32 and 34-45 are amended and new claim 46 is added. No new matter is added.

Section 112, Second Paragraph Rejection

The Examiner rejects claims 1-3 and 5-45 under 35 U.S.C. § 112, second paragraph as being indefinite for containing asserted informalities. Applicants believe that this rejection is overcome with the above amendments to the claims and reconsideration and withdrawal thereof are respectfully requested.

Section 102 Rejections

The Examiner rejects claims 1-3 under 35 U.S.C. § 102(b) as being anticipated by Sweet et al. The Examiner also rejects claims 31-32 under 35 U.S.C. § 103(a) as being obvious over Su 432197. Applicants have rewritten claims 31-32 to depend from claim 1. Claim 1 does not stand rejected under 35 U.S.C. § 102(b) or 35 U.S.C. § 103(a). Therefore, it is respectfully submitted that the rejection of claims 31-32 under 35 U.S.C. § 102(b) and 35 U.S.C. § 103(a) is rendered moot. Reconsideration and withdrawal of the rejections of claim 31-32 under 35 U.S.C. § 102(b) and 35 U.S.C. § 102(b) are respectfully requested.

Conclusion

Applicants respectfully submit that this application is in condition for allowance and such action is earnestly solicited. If the Examiner believes that anything further is desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below to schedule a personal or telephone interview to discuss any remaining issues.

Please charge any fee deficiency or credit any overpayment to Deposit Account
No. 01-2300, referencing Attorney Docket No. 024118-00013.

Respectfully submitted,



Robert K. Carpenter
Registration No. 34,794

ARENT FOX KINTNER PLOTKIN & KAHN, PLLC
1050 Connecticut Avenue, N.W., Suite 400
Washington, D.C. 20036-5339
Tel: (202) 857-6000
Fax: (202) 638-4810
RKC/mzk

Enclosure: Marked-Up Copy of Amended Claims

MARKED-UP COPY OF AMENDED CLAIMS

1. (Twice Amended) Compositions for the preservative treatment of raw animal hides, characterized in that such compositions contain a mixture of:

[-] at least one superabsorbent (co)polymer capable of absorbing the internal moisture of the rawhide when deposited on the surface of the hide, while allowing the internal moisture necessary for good preservation of the hide to remain, and of

[-] at least one other hydrophilic agent,

[-] optionally bactericides, preservative agents, and the like,

wherein the monomers used to form the superabsorbent polymers are monomers containing one or more members selected from [among the following] the group consisting of:

[(1) Monomers containing] carboxyl groups[:]; mono or polycarboxylic acids with monoethylene unsaturation;

[(2) Monomers containing groups of the] carboxylic acid anhydrides; [anhydride type:] polycarboxylic acid anhydrides with monoethylene unsaturation;

[(3) Monomers containing] carboxylic acid salts[:]; water-soluble salts; [()alkaline metal salts, ammonium salts, amine salts, [etc.]) of mono or polycarboxylic acids with monoethylene unsaturation;

[(4) Monomers containing] sulfonic acid groups; [:] aliphatic or aromatic vinylsulfonic acids;

[(5) Monomers containing] sulfonic acid groups; [:] alkaline metal salts, ammonium salts, amino salts of monomers containing sulfonic acid groups;

[(6) Monomers containing] hydroxyl groups; [:] alcohols with monoethylene unsaturation;

[(7) Monomers containing] amide groups; [:] (meth)acrylamide, N-alkyl (meth)acrylamides, N,N-dialkyl (meth)acrylamides, N-hydroxyalkyl (meth)acrylamides, vinyl lactames;

[(8) Monomers containing] amino groups; [:] esters containing amino groups of mono or di-carboxylic acid with monoethylene unsaturation heterocyclic vinyl compounds;

[(9) Monomers containing groups of] quaternary ammonium salts; and [:] salts of N,N,N-trialkyl-N-(meth)acryloyloxyalkylammonium.

5. (Twice Amended) Compositions for preservative treatment of animal rawhides as specified in claim 1, wherein the monomers used to form appropriate superabsorbent polymers are selected from [among the following] members of the group consisting of:

[-] acrylamide, acrylic acid, methacrylic acid, sulfomethylated [or] chloromethylated dimethylaminoethyl acrylate,
[-] chloromethylated and [or] sulfomethylated dimethylaminoethyl-methacrylate.

6. (Twice Amended) Compositions for preservative treatment of animal rawhides as specified in claim 1, wherein the superabsorbent polymers are selected from members of the group consisting of [among the following]:

[-] crosslinked polyacrylamides;

[-] crosslinked polyacrylates;

[-] crosslinked acrylamide/acrylate copolymers;

[-] sulfomethylated or chloromethylated acrylamide/dimethyl-aminoethylacrylate (ADAME) copolymers;

[-] sulfomethylated or chloromethylated acrylamide/dimethyl-aminoethylmethacrylate (MADAME) copolymers;

[-] crosslinked polymers of acrylic acid or methacrylic acid, inoculated and crosslinked copolymers of the polysaccharide/acrylic or methacrylic acid type, ternary crosslinked acrylic or methacrylic acid/sulfonated acrylamide copolymers and their alkaline metal or alkaline earth salts;

[-] hydrolyzates of crosslinked inoculated polysaccharide/acrylate or alkyl methacrylate copolymers, hydrolyzates of reticulated inoculated polysaccharide/acrylonitrile copolymers,

[-] hydrolyzates of crosslinked polysaccharide/acrylamide copolymers;

p-] hydrolyzates of crosslinked alkyl/vinyl acetate acrylate or methacrylate copolymers;

[-] hydrolyzates [hyrolyzates] of crosslinked inoculated starch/acrylonitrile/acrylamide/2-methylpropane sulfonic acid coplymers;

[-] hydrolyzates of crosslinked inoculated starch/acrylonitrile/vinylsulfonic acid copolymers; hydrolyzates of reticulated sodium carboxy-methylcellulose and analogous products and mixtures of such products; [:]

[-] crosslinked polymers of acrylic or methacrylic acid; crosslinked inoculated polysaccharide/acrylic or methacrylic acid copolymers, and ternary crosslinked acrylic or methacrylic acid/acrylamide/sulfonated acrylamide copolymers.

14. (Twice Amended) Compositions for preservative treatment of raw animal hides as specified in claim 1, wherein [the] ratios of the superabsorbent polymer and [the] other hygroscopic agent or agents range from 80 to 20% by weight.

17. (Twice Amended) Compositions for preservative treatment of raw animal hides as specified in claim 1, wherein the superabsorbent polymers have a grain size smaller than approximately 6 mm [and preferably ranging from 0.3 to 4 mm].

21. (Twice Amended) Compositions for preservative treatment of raw animal hides as specified in claim 1, wherein such compositions contain [additives] one or more members of the group consisting of a bactericide, an antiseptic agent, and a preservation agent.

24. (Twice Amended) Compositions for preservative treatment of raw animal hides as specified in claim 1, wherein such compositions contain the following superabsorbents and hygroscopic agent:

NaCl + [SAP] superabsorbent 1 (reticulated polyacrylate; grain size 0.5-3 mm) or

[SAP] superabsorbent 2

(Reticulated polyacrylate; grain size 100-800 microns) or

[SAP] superabsorbent 1 + [SAP] superabsorbent 2

(Reticulated polyacrylate + reticulate acrylamide/acrylate copolymer, grain size 0.1 to 3 mm) or

[SAP] superabsorbent 3

(Chloroethylated, reticulated (2-(idern)-methacrylate) [MADAME] acrylamide copolymer, grain size 0.5-3 mm) or

[SAP] superabsorbent 4

(Chloromethylated, reticulated ((2-dimethyl-amino ethyl) acrylate) [ADAME] acrylamide copolymer, grain size 0.5-3 mm)

25. (Twice Amended) Compositions for preservative treatment of raw animal hides as specified in claim 1, wherein such compositions contain the following agents:

[SAP Aquasorb 3005 KL (TM) reticulated acrylamide/acrylate]

200 g/kg hide of superabsorbent

[NaCl] 200 g/kg hide of NaCl.

31. (Twice Amended) A method for preserving an animal hide comprising applying an effective amount of the composition of claim 1 [superabsorbent polymer(s) SAP] to the animal hide.

32. (Twice Amended) A method for preserving an animal hide comprising applying an effective amount of the composition of claim 1 [superabsorbent polymer(s) SAP] and one or more hygroscopic agent(s) to the animal hide.

34. (Amended) The composition of claim 1 [4] wherein said super absorbent polymers are (meth)acrylic acid, acrylic acid, methacrylic acid, maleic acid, or fumaric acid.

35. (Amended) The composition of claim 1 [4] wherein said super absorbent polymers are maleic anhydride.

36. (Amended) The composition of claim 1 [4] wherein said super absorbent polymers are sodium (meth)acrylate, trimethylamine (meth)acrylate, triethanolamine (meth)acrylate, sodium maleate or methylamine maleate[)].

37. (Amended) The composition of claim 1 [4] wherein said super absorbent polymers are vinylsulfonic acid, allylsulfonic acid, vinyltoluenesulfonic acid or styrene sulfonic acid.

38. (Amended) The composition of claim 1 [4] wherein said super absorbent polymers are (meth)acrylic sulfonic acids (sulfopropyl (meth)acrylate, propyl 2-hydroxy-3-(meth)acryoxide sulfonic acid.

39. (Amended) The composition of claim 1 [4] wherein said super absorbent polymers are (meth)allyl alcohol, ethers or esters of polyols with monoethylene unsaturation; [(]alkylene glycols, glycerol, polyoxyalkylene polyols[)], hydroxyethyl

(meth)acrylate, hydroxypropyl (meth)acrylate, triethylene glycol (meth)acrylate or mono (meth)allyl ether of poly(oxyethylene) oxypropylene (in which the hydroxyl groups may be etherified or esterified).

40. (Amended) The composition of claim 1 [4] wherein said super absorbent polymers are N-methylacrylamide, N-hexylacrylamide, N,N-dimethylacrylamide, N,N-di-n-propylacrylamide, N-methyl (meth)acrylamide, N-hydroxyethyl (meth)acrylamide, N,N-dihydroxyalkyl (meth)acrylamides, N,N-dihydroxyethyl (meth)acrylamide, vinyl lactames or N-vinylpyrrolidone.

41. (Amended) The composition of claim 1 [4] wherein said super absorbent polymers are esters of morpho-linoalkyl, dimethylaminoethyl (meth)acrylate, diethylaminoethyl (meth)acrylate, mopholinoethyl (meth)acrylate, dimethylaminoethyl fumarate, vinyl pyridines [(for example], 2-vinyl pyridine, 4-vinyl pyridine[]], N-vinyl pyridine[]] or N-vinyl imidazole.

42. (Amended) The composition of claim 1 [4] wherein said super absorbent polymers are N,N,N-trimethyl-N-(meth)acryloyloxyethylammonium chloride, triethyl-N-(meth)acryloyloxyethylammonium chloride or trimethyl ammonium 2-hydroxy-3-(meth)-acryloyl-oxypropyl).

43. (Amended) The composition of claim 1 [4] wherein said super absorbent polymers are reticulation products of an acrylic acid homopolymer or of a salt of this

acid, acrylic acid (or acrylic acid salt)/methacrylic acid (or methacrylic acid salt), or inoculated starch/acrylic acid (or acrylic acid salt) copolymers.

44. (Amended) The composition of claim 1 [4] wherein said super absorbent polymers are products of reticulation of inoculated hydrolyzed starch/ethyl acrylate copolymers, hydrolyzed inoculated starch/methyl methacrylate copolymers, hydrolyzed inoculated starch/acrylonitrile copolymers, or hydrolyzed inoculated starch/acrylamide copolymers.

45. (Amended) The composition of claim 1 [4] wherein said super absorbent polymers are products of reticulation of hydrolyzed ethyl methacrylate/vinyl acetate copolymers or of hydrolyzed methyl acrylate/vinyl acetate copolymers.